



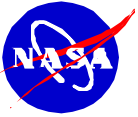
SPACE SHUTTLE PROGRAM
Space Shuttle Vehicle Engineering Office
NASA Johnson Space Center, Houston, Texas



STS-112

FLIGHT READINESS REVIEW

FERRY READINESS
September 17, 2002



STS-112 Flight Readiness Review Ferry Readiness

Presenter **Don L. McCormack, Jr.**

Date **Sept 17, 2002**

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Ferry Plan Summary

- Ferry Planning Readiness Review conducted on 9/12/02 with no issues identified
- Ferry Flight Readiness Review to be conducted one day prior to planned ferry date
- Hardware summary:
 - Orbiter: OV-104 (Atlantis)
 - NEOM ferry weight (lbs): 200348 (no fluids off-loaded)
 - NEOM ferry center of gravity (in): X_o 1124.9 Y_o -0.5 Z_o 370.3
 - » NEOM mass properties are within specified limits – Orbiter middeck ballast is not required
 - Attach hardware and ferry plugs are ready to support
 - Tailcone 2 ready to support – at DFRC and will be assembled during mission
 - Shuttle Carrier Aircraft (SCA): NASA 905 is ready to support
- Configuration drawings have been released



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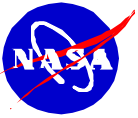
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Ferry Plan Summary - Continued

- **DFRC seven day turnaround with ready-to-ferry on day seven (early afternoon)**
 - **Most likely departure will be morning of day eight but option will be preserved to depart on the afternoon of day seven**
- **Flight plan**
 - **Two flight legs that can be performed in one day will be required to complete the ferry flight**
- **Prime landing sites, weather alternates and emergency landing fields selected**
- **Pathfinder: USAF C-141 or C-17 (purge equipment required)**
- **Purge – purge equipment will be deployed due to the potential for low temperatures at ferry overnight stop locations**
 - **Purge circuit 1 (OMS/RCS – ambient air temperature below 45 °F for greater than 2 hours)**
 - **Purge circuit 2 (not required for this mission)**



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STS-112 FERRY READINESS STATEMENT

A Ferry Planning Readiness Review was conducted in accordance with the Space Shuttle Vehicle Engineering Office flight preparation process plan contained in NSTS 08117, Requirements and Procedures for Certification of Flight Readiness. This certifies that aircraft, equipment, and ferry requirements are ready to support Orbiter ferry operations.

Don L. McCormack, Jr.
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